



The Esquesing

March-April 2015 Newsletter
Volume 49, Number 4



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UPCOMING SPEAKERS

Meetings begin at 7:30 pm on the second Tuesday of each month, September to June. The meeting location is St. Alban the Martyr Anglican Church, 537 Main Street, Glen Williams.

March 10, 2015

Richard Aaron, *Biomimicry*

Richard is a popular presenter who speaks frequently to nature clubs about a wide range of topics. He forwarded this synopsis of his upcoming talk to our club:

Biomimicry, from the Greek words *bios* (life) and *mimesis* (imitation), is a recent discipline that strives to solve problems by imitating designs and processes from nature. Discover how 3.8 billion years of "research & development" is inspiring engineers, scientists, architects and others to develop everything from gecko-like adhesive tape to "echolocating" canes for the blind.

April 14, 2015

Fiona Reid, *Mysterious, Marvelous Mammals*

Our very own president is a mammal maven of the highest order. Fiona is the author of the very impressive Peterson's Field Guide to the Mammals. She basks frequently in tropical climates, whilst leading field trips to see and photograph exotic mammals. Fiona's unrivalled knowledge and splendid images will make this a memorable presentation.

May 12, 2015

Emma Garden, *Aquatic Insects*

Emma is a rising star in Credit Valley Conservation who has a special interest in the insects that live in water for all or part of their lives. These insects – their populations and diversity – are of critical importance to the health of aquatic ecosystems. Emma will introduce us to these important environmental role players. And, if we are nice to her, she may invite us out on a follow-up field trip to experience the critters first hand.

June 9, 2015: An outdoor indoor meeting

No indoor meeting. We will, instead, as per tradition, head out to enjoy an evening walk to close out our Naturalist Club season. The destination will be local, but has yet to be determined.

OUTDOOR EVENTS

February 28, 2015.

Tracks, signs and winter birds at the RBG: Leaders, Fiona Reid, Don Scallen, and David d'Entremont. We will be exploring the Royal Botanical Gardens in Burlington with David d'Entremont, looking for tracks in the snow, signs of mammal activity on tree trunks, and we can check open water for ducks and other winter birds. Meet at 2 p.m. For location and car-pooling please contact Don at dscallen@cogeco.ca.

Sat. March 14, 2015.

Tundra Swans at Long Point: Leader, Ray Blower. Flocks of Tundra Swans stop at Long Point during their spring migration to their northern breeding grounds. Many other species of waterfowl, early-returning songbirds, Bald Eagle, and Short-eared Owl may also be seen on this long day trip. Be advised that lunch at the restaurant is usually after 1:00 and we usually do not head for home until around sunset. Bring snacks, water, a lunch or money for the restaurant, and layers of warm clothing, etc. Call Ray ([519-853-0171](tel:519-853-0171)) by Thursday, March 12 for more details.

Sun. March 15, 2015.

Big Tree Measuring Part 3, Limehouse CA: Leader Don Scallen. Meet at the Community Centre on 22nd Sideroad at 1:30 p.m. Contact Don at dscallen@cogeco.ca for further information.

Sat. April 18, 2015.

Beamer Conservation Area Hawkwatch, Grimsby: Leader, Ray Blower. Stops on the way to Grimsby include Scotch Block reservoir and La Salle Park to see waterfowl and early songbirds. Beamer C.A., at the top of the escarpment in Grimsby, provides a large clearing and two cliff-edge platforms to search the sky for migrating hawks. Walking trails in the surrounding woods show early wildflowers and more songbirds. Bring a lunch, hat sunscreen, binoculars, etc. Call Ray ([519-853-0171](tel:519-853-0171)) for starting location and time.

Sun. May 17, 2015.

Spring Birding at Thickson Wood, Lynde Shores Conservation Area and Cranberry Marsh: Leader, Ray Blower. If I had only one day in the spring to go birding, this is where I would go. These locations provide a wide variety of habitats including mature forest, meadows, swamps, marshes, old fields and Lake Ontario and its shoreline. The result is a diverse collection of bird species, especially during spring migration. Scheduling on the Sunday of the Victoria Day holiday weekend has resulted, so far, in trouble-free driving to and from these Whitby birding hot spots. Bring a lunch, water, hat, sunscreen, binoculars, etc. Call Ray ([519-853-0171](tel:519-853-0171)) for starting location and times

PRESIDENT'S MESSAGE

Well, where is Spring??

I hope March will bring us some more benign weather than February. It can't get much colder, can it? We do have a roster of good talks and outdoor events to take the chill off, and we hope to see you all at these great events.

We are looking for a volunteer to take over **newsletter design**. It is a fairly easy job taking an hour or two once every two months. Please talk to one of the executive if you are interested, thanks.

I will not be present for the March meeting, but I hope to see everyone in April. I think I have to be at that one because rumor has it I am the speaker!

Best wishes, Fiona

SHOREBIRDS



Whimbrel, photo by J. Perz

When I first became interested in birding, shorebirds were only infrequently encountered birds that were challenging to identify because of their unremarkable plumage. Not until I learned more about shorebirds did I fully appreciate this incredible group of birds.

Shorebirds exhibit diverse bill morphology and feeding behaviour – avocets scything their unusual upcurved bill, for example – which allows many species to coexist in coastal or wetland habitats with which they typically associate. As a group, shorebirds are also undergoing among the highest rate of decline. Few shorebirds are seen in Southern Ontario, except during migration because many traverse long distances to breed and rear young in the Arctic where they are thought to capitalize on the superabundance of invertebrate prey that is typical of the brief summer.

As a student, I was fortunate to be given the opportunity to study Whimbrel breeding near Churchill, Manitoba. There, I also became acquainted with other shorebirds that make up a large and ubiquitous component of vertebrate biodiversity on the relatively barren northern landscape. After daily encounters of American Golden-Plover, Hudsonian Godwit, Dunlin, Short-billed Dowitcher, Lesser Yellowlegs, Stilt Sandpiper, and Red-necked Phalarope throughout the breeding season, I began to understand the fascination with this group of birds.

Shorebirds are also amazing because it includes species like the Bar-tailed Godwit, with the longest non-stop flight ever recorded (11,500 km across the Pacific Ocean from breeding grounds in Alaska to

New Zealand). Because migratory shorebirds depend on a network of habitats throughout the hemisphere, factors at any stage in their annual life-cycle may be contributing to decline. Habitat loss and degradation on nonbreeding grounds is likely having a negative effect on many shorebirds. Many shorebirds are particularly vulnerable during migration because large numbers congregate at a few stopover or staging sites to rest and refuel. For example, the commercial overharvesting of horseshoe crabs in Delaware Bay has impacted Red Knots that rely on horseshoe crab eggs at this critical stopover site to complete their northward journey to breeding grounds in the High Arctic. Other hazards during migration or on nonbreeding grounds include hunting where it is not prohibited, contaminants, and increased frequency and severity of storms due to climate change.

There are also factors on the breeding ground that may be contributing to population declines. Increased resource exploration and extraction may destroy habitats, disturb nesting birds, and increase risk of environmental contamination. Furthermore, the effects of climate change are expected to be pronounced on the northern breeding grounds of many shorebirds and may include loss of synchrony between peaks in invertebrate prey availability and nesting or chick-rearing periods. The work of a community of researchers will continue to fuel conservation measures but coordinated action from a number of jurisdictions is required in order to effectively address shorebird population declines.

By Johanna Perz

CLIMATE CHANGE and Things That Go Bite in the Night (and Daytime Too)

Despite the denials of a few doubters, there is ample proof that climate change is here. But climate change is more than just an increase of a few degrees on an overall annual average. Sometimes the consequences are not things that were predicted. Such is the case with some biting insects as described below.

The information provided here is a synopsis of some recent work conducted by Fiona Hunter's laboratory at Brock University. She has been studying biting insects for many years. Her work was particularly valuable when the West Nile Virus (WNV) made an appearance in 2002. That virus is spread by mosquitoes. WNV first arrived in New York in 1999, possibly carried there in imported birds. The disease has spread considerably since it first arrived, often with devastating consequences for crows and other Corvids as well as for northern owls. The virus has proven to be a significant problem for humans where there is a good correlation between human infections and positive tests for the virus in nearby mosquito pools. In Ontario, WNV was a particular problem in 2002 and in 2011 and 2012. The virus remains as a problem in North America and shows a strong ability to mutate.

On the topic mosquitoes, climate change, together with other factors, has had a great influence on their distribution. Formerly, 58 mosquito species were known to occur in Ontario. This list has recently increased to 67 species with the additions of *Aedes japonicus*, *Aedes churchillensis*, *Aedes nigripes*, *Aedes pullatus*, *Anopheles crucians*, *Anopheles perplexans*, *Anopheles smaragdinus*, *Culex salinarius*, and *Culex erraticus*. Mosquitoes now represent a greater health risk for humans and other organisms. The arrival of *Aedes japonicus* is a particular concern as it has spread from just a single health unit area in Ontario in 2001 to 22 health units in 2004. *A. japonicus* will out-compete other mosquito species in a mixed population. It is a known vector of several viruses and is justifiably a health concern.

The populations of some previously-known *Anopheles* species in Ontario changed between 1976 and 2007. For example, *Anopheles punctipennis* showed a slight decrease. By comparison, *Anopheles quadrimaculatus* showed a large increase in number. This is a particular concern as it is known as a vector of malaria and dog heartworm and might live in basements. The incidence of the heartworm appears to be on the increase. *A. quadrimaculatus* is now the most common mosquito in Niagara and the second most common in Essex. *Anopheles walkeri* was very common in 1922 to the 1970s but now it is hard to find. It requires large pristine wetlands and a period of cold conditioning for the eggs to hatch. With warmer winters, the cold requirement may not be met so the species may be disappearing for that reason. Encounters with *Anopheles earlei* are now very infrequent.

Studies of no-see-ums in the Niagara area is largely dependent upon the use of a Rothamsted trap. This is essentially a very large vacuum cleaner with an entrance opening 40 feet above ground level. This is only the second such collecting device in North America. Recent discoveries from the sampling there have indicated the unexpected presence of *Culicoides sonorensis* and *Culicoides variipennis*. No-see-ums are notable concerns as they are known vectors of the Blue-tongue Virus in sheep and goats, hemorrhagic diseases in livestock, and equine encephalitis in

horses. This group of tiny biting flies may prove to be an increasingly significant problem as climate shifts continue to occur.

While we cannot expect the biotic world to remain entirely static on a permanent basis (e.g. natural ranges of various species may expand or contract), we should expect that a fairly stable system and geographic ranges of the normal biota would prevail. But in the presence of human-mediated transportation from exotic locales and in changing (warmer) climate, the some species may expand or contract their range quite quickly. In particular, species whose ranges might have been defined by a controlling temperature factor might be able move into new areas or perhaps lost from an area. This appears to be the case among some of the biting flies. A consequence of climate change may therefore involve the challenge of previously-absent but very important diseases of humans and animals.

By W.D. McIlveen

THE BIG TREE PROJECT



On two occasions this winter, hardy club members ventured into the woods to admire and measure big trees. The first outing took us to the southwest corner of Halton Hills to Esquesing Forest, a property of Halton Conservation. Esquesing Forest contains a small pocket of old growth. Dominant species here are white pine, red oak, sugar

maple and eastern hemlock. The tree with the largest diameter however was a white ash growing, not in the woodland proper, but across from it on the east side of Dublin Road, adjacent to the Granite Ridge Golf Course (a misnomer if ever there was one – the Escarpment ridge is dolomite, not granite! But I digress). Though not

particularly tall, the diameter of this ash tree was an impressive 118 cm.

A second big tree event took us to Terra Cotta Conservation Area in the northeast corner of Halton Hills. An oak/hickory woodland occupies part of TCCA. This is a rare forest composition at this latitude in Ontario. We measured large bur oaks and wonderfully charismatic shagbark hickories. A white pine at 103 cm in diameter proved to be larger than any found at Esquesing Forest.

Why measure big trees? Big trees are beautiful. Like people they develop character as they age. They are guardians of time, holding within their stalwart trunks, memories of local conditions over many generations. They can even hint at particular events that occurred long ago. (See italics below) Seeking big trees also provides a

focus that can expand our appreciation of all trees. This has particular poignancy today, with so many of them succumbing to introduced diseases.

Please take a look at the list of the biggest trees we've found. If you know of one that might challenge the current leaders let us know. And please note that we haven't yet measured a few species that can grow very large indeed, including black walnut, American elm and silver maple. Note also that even trees of typically small size, such as ironwood and blue beech, deserve our attention as well. In time I hope our list grows to represent all the tree species found in this area.

There will be another tree measuring adventure on Sunday March 15. Think about coming out!

Halton Hills Big Tree List, March 2015

Latin Binomial	Common Name	Location	Diameter (cm)
<i>Fraxinus americana</i>	White Ash	EF	118
<i>Acer rubrum</i>	Red Maple	EF	76
<i>Acer saccharum</i>	Sugar Maple	TCCA	97
<i>Tsuga canadensis</i>	Eastern Hemlock	TCCA	108
<i>Pinus strobus</i>	Eastern White Pine	TCCA	104
<i>Fagus grandifolia</i>	American Beech	EF	65
<i>Quercus rubra</i>	Northern Red Oak	EF	106
<i>Quercus macrocarpa</i>	Bur Oak	TCCA	90
<i>Prunus serotina</i>	Wild Black Cherry	EF	71
<i>Carya cordiformis</i>	Bitternut Hickory	TCCA	50
<i>Carya ovata</i>	Shagbark Hickory	TCCA	56
<i>Ostrya virginiana</i>	Ironwood	EF	16
<i>Carpinus caroliniana</i>	Blue Beech	EF	9
<i>Betula alleghaniensis</i>	Yellow Birch	EF	23
<i>Betula papyrifera</i>	Paper Birch	EF	35
<i>Picea abies</i>	Norway Spruce	EF	48
<i>Thuja occidentalis</i>	Eastern White Cedar	EF	56
<i>Tilia americana</i>	American Basswood	EF	66

Locations: EF = Esquesing Forest TCCA= Terra Cotta Conservation Area

Thanks to Bill McIlveen for providing the original template for this list. Bill has a far more detailed and extensive list of trees including precise locations. Diameter measurements have been rounded to the nearest centimetre.

My thanks to Bill McIlveen who brought a plethora of tree measuring devices to our outings. After the Esquesing walk, Bill provided some fascinating information that might shed some light on the age of some of the Esquesing Forest giants. He sent me an excerpt from a 2008 Nassagaweya Historical Society newsletter that reported a record of a cyclone or tornado that may have passed through the area containing Esquesing Forest between the years 1740 and 1790. Hamilton botanist Paul O'Hara told Bill that the native people at the time – the Mississauga – witnessed this event and referred to it as “The Big Wind”. The gist of this? Well if the “Big Wind” took down the existing trees at Esquesing during that time period, then the current ages of the large trees at this site may range from 225 to 275 years old!

By Don Scallen

NEWSLETTER SUBMISSIONS & ADS

The Halton/North Peel Naturalist Club newsletter is published five times a year – every two months except July and August. Contributions from members are welcome.

Lou Marsh (marnmc@xplornet.com) has some bird books to give away, but you have to go pick them up from his home in Speyside:

- 6 books on Birds of the Soviet Union
- Birds of Suriname
- Birds of North Africa
- Birds of the Philippines
- 2 books on Birds of China (in French)
- Birds of Zaire (in French)

Halton/North Peel Naturalist Club, Box 115, Georgetown, Ontario L7G 4T1
Charity Registration number: 869778761RR0001

<u>Executive</u>			<u>Appointments</u>		
President:	<i>Vacant</i>		Membership:	Valerie Dobson	(905) 828-1729
Past President:	Fiona Reid	(905) 693-9719	Publicity:	Johanna Perz	(647) 289-9386
Vice-President:	Don Scallen	(905) 877-2876	Ontario Nature Representative:	Katie MacDonnell	
Secretary:	Emily Dobson	(647) 996-6512	Newsletter:	OPEN	
Treasurer:	Janice Sukhiani	(647) 408-9515	Webmaster:	John Beaudette	
Roving:	William McIlveen, Kevin Kerr, Nikki Pineau, Anne Fraser		<u>Stewards:</u>		
			Crozier Property:	Marg Wilkes	
			Hardy Property:	Ray Blower	

Membership for one year: \$30 Single; \$40 Family
The Halton/North Peel Naturalist Club is an affiliated member of Ontario Nature.
www.hnpnc.com | info@hnpnc.com

WELCOME NEW MEMBERS!

Yves Scholten and Thomas Steller

Halton/North Peel Naturalist Club Meeting Location

St. Alban the Martyr Anglican Church, 537 Main Street, Glen Williams

